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### Students' Digital Footprints

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## **Students' Digital Footprints: curation of online presences, privacy and peer support**

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### **Abstract**

The University of Edinburgh 'managing your digital footprint' (2014-2015) campaign was an innovative and collaborative cross-University initiative. The campaign aimed to address a potential digital skills gap and to better equip and support students transitioning into, out of, and while studying at the University. The campaign targeted all student cohorts (undergraduate, postgraduate, PhD, and online distance students), with the aim of raising awareness of effectively managing an online presence (digital footprint). 'Digital Footprint' is now a mainstreamed service, with many of the University support services embedding this brand in their support to students, researchers and staff. Running in parallel to the campaign was a research project (funded by the Principal's Teaching Award Scheme) which was led by the Institute for Academic Development in collaboration with EDINA, School of Education, and the Student Association (EUSA). The research team examined the responses to two campaign surveys (n=1487) and carried out 15 interviews with six students. The quantitative and qualitative data gathered from a diverse group of students has enabled the Institution to gain a better understanding of how students manage and curate their online presences, including their experiences and issues related to privacy and risk management. Students were asked to share their advice with others, and one stated "Be responsible, or at least aware, of the image of yourself that you are putting across to the world" (undergraduate student). In addition, the research data uncovered how students are using social media as a peer support tool and their perceptions of the benefits and challenges of social media.

This paper will report findings on students' curation behaviours around their online presence and privacy include various, including some more sophisticated privacy management approaches such as use of a specific email account for online accounts (42% of survey respondents), use of pseudonyms and anonymity online (48%), and the use of privacy and tagging settings. Some students needs and intents are not reflected by their experiences online, for instance participants reported unwanted tagging of photographs (11%), bullying (4%), and finding information online about themselves that they did not think was public (5%). In addition to talking about students' curation approaches we will also reflect on some of the motivations and positive experiences shaping their use of social media and their management of their digital footprints, such as peer support (experienced by 16% of respondents) and professional networking opportunities. This paper will reflect on our findings and how they have been used to provide evidence-based guidance to support University services as well as providing evidence and resources (e.g. e-professionalism guidelines and OERs) for colleagues with responsibility for embedding digital social media in learning and teaching.

**Keywords:** Digital Footprint, social media, students, peer support, privacy

### **1. Introduction**

The University of Edinburgh 'managing your digital footprint' (2014-2015) campaign was an innovative and collaborative cross-University initiative to address a potential digital skills gap and to better equip and support students transitioning into, out of, and while studying at the University. The campaign targeted all student cohorts, with the aim of raising awareness of effectively managing an online presence (digital footprint). 'Digital Footprint'

is now a mainstreamed service, with many of the University support services embedding this brand in their support to students, researchers and staff. Running in parallel to the campaign was a research project which was led by the Institute for Academic Development in collaboration with EDINA, School of Education, and the Student Association (EUSA).

This paper presents findings and analysis of the data collected through both the campaign surveys and research interviews. We focus on findings associated with students' curation behaviours, including approaches to managing digital tracks and traces beyond their control (Barbour and Marshall 2012), as well as some of the complex and challenging areas of online presence and privacy, such as sophisticated privacy management approaches, including use of pseudonyms and anonymity online, and the use of privacy and tagging settings.

Furthermore, we highlight how this research has enabled the production of evidence-based guidance to support University services and develop resources (e.g. e-professionalism guidelines and OERs) and we identify a number of areas and emerging themes which are worthy of further consideration.

## 2. Research Methodology

The Digital Footprint research (2014-2015) was funded by the University of Edinburgh's Principal's Teaching Award Scheme (PTAS) and ran in parallel to the University-wide Digital Footprint campaign, which targeted all students, ~32,000 (undergraduates, postgraduates, online distance learners, and PhD researchers). The aim of the campaign was to raise awareness about managing an online presence (digital footprint), especially in relation to e-professionalism, employability, research and impact opportunities, as well as general online management. An overview of the campaign, including the activities, student engagement outcomes and preliminary research findings were highlighted at the European Conference on Social Media 2015 (Osborne and Connelly 2015) and the following discussion presents an analysis of key findings.

A brief overview of the three-stand methodological approach will help to set the scene. The first phase of data gathering included two surveys issued, during the campaign (Oct 2014 and May 2015). The surveys received ethical approval from the University's central survey team, who then issued them to a representative sample of the student cohort (approximately 11,000 students for each survey). The surveys were designed in the BOS survey tool (University of Bristol 2016) and captured both quantitative and qualitative data regarding what social media platforms are being used; the ways in which students use social media; and how they manage their digital footprint. A total of 1,457 students responded to the two surveys.

The second data gathering strand involved two members of the research team facilitating two lab-based focus groups, which guided a small number of students through a sequence of activities, selected to encourage them to reflect on their own tracks and traces online. The findings from the labs, aligned with the survey data.

The third data capture approach, which received ethical approval from the School of Education, modeled on 'ethnographic tracing' (Hine 2000) and involved fifteen in-depth interviews taking place with six students over four months. This approach provided an opportunity for deeper insight into online behaviours and digital footprint management.

## 3. Curation of Online Presences

The process of going to and progressing through University is a liminal process (Meyer and Land 2005). Students' engage with new challenges and *threshold concepts* (Meyer and Land 2003) in their formal study, but they also face transformative experiences across personal, social and professional (or para-professional) identities (e.g. Briggs, Clark and Hall 2011, Baxter and Britton 2001).

These shifts in students' identities are also apparent in their online presences and our analysis indicates that students' management and curation tactics in online social media spaces, reflect these complex and changing

senses of identity and faceted identity play (Farnham and Churchill 2011), and of presenting multiple identities at once (Goffman 1969).

boyd (2014) discusses the shift in online social spaces over the last twenty years, specifically the move from more anonymous or pseudonymous spaces enabling such identity play, towards those with tight couplings to real life identities and contexts of users. boyd also witnesses young people developing new identities online, abandoning older presences and ways of presenting themselves and argues

*"Regardless of the reason, the outcome is a hodgepodge of online identities that leave plenty of room for interpretation. And in doing so, teens both interpret and produce the social contexts in which they are inhabiting" (2014, p. 38).*

In our own research we found students - ranging from undergraduates near the age of boyd's teenage informants through to older postgraduate and PhD students (who vary widely in age) - inhabiting a similarly complex range of identities. For instance, in our ethnographic tracing work, participants defined different spaces as presenting, and being curated to present, different facets of their identity.

*"...I think it's more because I trust the people that I'm friends on Facebook so I'm more picky about who I allow to put things on my wall...my boundaries are more set about who I allow to be my friend" (Interview Participant 5)*

*"I keep my tumblr completely separate just in case I need a place to vent about friends/drama/politics/etc..." (Participant, Survey 2)*

In many cases participants specifically voiced strong concerns for the maintenance of separation between their own current sense of identity in the University/student context, with the identity they feel comfortable sharing with family:

*"My twitter, especially in the past, was more personal and I don't think family would appreciate that. Context is crucial, and that can be lost after time." (Participant, Survey 1)*

As part of our exploration of students curation tactics we asked students to consider what digital tracks and traces were already available online, and whether there was anything that they would not want family, friends or a partner to see. Whilst the vast majority responded "no" (76%), a significant minority (17%) responded that there was something online about them, that they would not want (some) others to see. Tellingly only a small number of participants (7%) indicated that they did not know or had not thought about this before, indicating participants high ongoing level of reflection and engagement with their digital identity and online tracks and traces.

In this context it is perhaps unsurprising that we found students taking highly individual approaches to curating their online identity - and often multiple identities - informed by their personal circumstances. For instance many participants commented on the deliberate separation of their personal and social life from family audiences, in order to avoid conflict of "incompatible facets" (Farnham and Churchill 2011, p. 362) around areas such as sexuality and/or sexual practices, drinking and social life, and use of bad language/swearing.

This idea of presenting multiple facets, or curating identities for specific audiences was not universal, with some voicing the importance of curating a single consistent identity. However, some of these participants curating a consistent online identity voiced subtler tactics which suggest variance in online/offline presentation that aligns with the concept of onstage/offstage presentation of self (Goffman 1969). For instance, this participant explains their use of pseudonyms to curate a consistent online identity

*"Anything I post online is something I'm happy for anyone and everyone who I'm connected to via social media to see, including people I may not know (e.g. friends of friends, although the reason for using a*

*pseudonym is to maintain a modicum of control over whether those people associate my online presence with my real life presence).*" (Participant, Survey 2)

In some cases, participants describe curating online identities that are not just tailored to different audiences, but may also be carefully designed to future proof their digital footprint. These tactics include the use of privacy settings, pseudonyms and anonymity (see Privacy section), thoughtfulness over the appropriateness of any content they share (though it is unclear how individual's perceptions of "appropriate" may change over time), and, in some cases, elements of self-censorship in how they present themselves online. In our surveys 9% of respondents indicated that they have deleted a post to avoid upsetting others, whilst many participants also commented on the information they consciously choose not to disclose, e.g:

*"I don't share personal information online."* (Participant, Survey 1)

In many ways, these curation practices reflect the type of best practices promoted during the "Managing your digital footprint" campaign. However, it is also worth noting that overly cautious approaches may raise different risks, from limiting the potential usefulness of these online social spaces for informal learning and peer support, to challenges arising from changes to terms of service or potential data breaches. More commonly however tension appears to arise from mismatched expectations over online identity.

### 3.1 Digital Footprints beyond control

Despite many participants taking deliberative actions to curate and tailor their online presence and identities it is clear that some of their needs and intents are not being reflected by their reality of experiences online. Indeed, in all three data collection routes participants discussed not only their own curation behaviours but the impact of others' practices on their own "digital footprint".

Survey participants reported a range of behaviours by others which had direct impact on their own online identity, including unwanted tagging of photographs (11%), unwanted comments (11%), and those who had found information online about themselves that they did not think was public (5%). Participants voiced concerns about digital tracks and traces beyond their control, including not only material shared by other friends but by themselves (historically) and by organisations including the university.

*"...there are some badly translated texts online with my name on them, I did that work when I was starting uni so I am ashamed of it. I wish it wasn't there."* (Participant, Survey 1)

*"Don't have contact with my parents, but unfortunately, if they googled me, they would be able to find my place of study and what I study."* (Participant, Survey 2)

Whilst in many cases such practices may have little long term consequence, this type of involuntary presentation or definition of identity by others has the potential to be distressing and, under some circumstances, can have substantial negative consequences around personal reputation (as vividly described in Ronson 2015) and employment status (e.g. Otomewo v Carphone Warehouse Ltd in XpertHR (2012).

Barbour and Marshall (2012), in their work in academic digital identities, have defined these kinds of digital tracks and traces left by others as having an impact (possibly even a defining impact) as the "*Uncontrollable Self*". For Barbour and Marshall this *self* is presented as the consequence of not consciously managing online tracks and traces, in contrast to more deliberate presentations of self. However unwanted posts or tags can sometimes linger, meaning that some tracks of traces are beyond the control of the individual may continue to exist in parallel to a more carefully curated online presence or identity.

### 3.2 Curating a professional or higher profile identity

"I'm very into disability rights and awareness; so I'm happy for most people to see my posts etc. as that is what I talk about most." (Participant, Survey 2)

For some students participating in our research, there was a clear focus on building a positive digital identity or personal brand, whether for their own personal interests or goals (as in the example above), or with a view to future employment and career roles. Participants recognised this both as an opportunity and a reason for taking particularly cautious decisions about their presentation of a professional online self, as illustrated below.

*"...to be completely honest, I can't imagine a job, these days, in any kind of high profile job where your online presence wouldn't matter"* (Participant 2, Interview 2)

*"I am not open about my sexuality with most family and some friends. I don't know how they would react so I adjust privacy settings to hide certain things on FB, and do not post about LGBT issues on any of my "professional" accounts, even when I might like to."* (Participant, Survey 1)

To achieve these ends we found that some of our participants were representing themselves online both using their real identities and pseudonymous identities, depending on the intended purpose and/or audience. For some the choice to identify themselves online was deliberate and intentionally tied to their real world role(s) and ambitions, such as this interview participant:

*"the most important thing is number one have a photograph that's you and that doesn't look unprofessional"* (Interview Participant 6 - talking about LinkedIn and looking professional online)

*"...it is a good balance between professional but also showing that you are an outgoing kind of a person"* (Interview Participant 6).

For others concealing of identity was a deliberate curation tactic requiring sophisticated management of privacy and site settings (see Privacy section). Whilst most of our students discussed their use of mainstream social media sites such as Facebook (used by 92% of survey respondents) and Twitter (48%), a significant minority also indicated use of less visible (e.g. Reddit) or "anonymous" social networking spaces (such as YikYak), as a way to separate social life or opinion from more formal, more readily searched or more employer-accessible spaces.

## 4. Privacy

The earlier discussion has illustrated different approaches taken by students to manage their privacy online, especially in relation to their curation of online identity. In order for institutions to better support students and equip them while at university as well as their transition out of the university, it is important to understand how students are managing their privacy settings, including the use of tagging, platform settings, behaviours and potential consequences of active and/or less informed privacy management.

It is not suffice to assume privacy, as for some it may be a challenge or a fight to take control (boyd 2014, p. 60). This is true of many of the students who were surveyed and interviewed, as they may consider themselves to be private but find the accessibility, share ability and visibility of their identity and information can be at odds with remaining private. This was illustrated in the survey data, where 5% of students stated that they had found something online about themselves that they did not think was public. Therefore, being in a "networked public" can be challenging to navigate as the contradiction being public and private is heightened, as there is a difference between "being in public and being public" (boyd 2014, p. 57).

Other examples of privacy management relates to the ability to tag someone in a photo, which is a prominent feature used on Facebook but one that can encroach on a users' possible control of privacy. A recent Pew report stated that "12% of users tagged a friend in a photo, but 35% were themselves tagged in a photo" (Hampton et al.

2014). Our findings indicated that nearly 11% (survey 1) and 10.7% (survey two) experienced unwanted tagging in photos. How a student accesses a platform can also have consequences, which was highlighted by one of the interview participants, who found it difficult to monitor tagging on photos, as they did not have Facebook on their phone (participant 1). Therefore, technology access, the social media platform and behaviours of users, can all impact on privacy management.

#### 4.1 Privacy settings are in support of identity curation

The vast majority of student participants (61%) stated that they rarely changed their privacy settings, although it is not clear what the reasons for this are, and the extent to which participants are aware of current or newly changed terms of service, default settings, etc. However, in contrast, nearly a quarter of them stated that they changed their privacy settings monthly (24.7% in survey 1 and 23.8% in survey 2), which suggests a good understanding of their engagement with social media platforms and effective management of their online presence.

In order to manage the risks of being defined by other people's tags, comments, traces, the best practice advice is usually to ensure privacy and other settings on social media sites are appropriately set up, and regularly updated. Our findings indicated that students' use of privacy settings and the technical affordances (and limitations) of social media spaces with varying levels of sophistication.

*"Privacy settings allow me to keep private what I'd like to be. For instance I have a tattoo some family doesn't know about, and I can ensure they don't see about it if need be."* (Participant, Survey 2)

In addition to engaging with tagging, profile visibility and similar settings, and approaches included the use of a specific email account for online accounts (42% of survey respondents), enabling separation of real world or student identities from online identities, and the use of pseudonyms and anonymity online (48%), and the use of privacy and tagging settings. Participants also described approaches to separate public and private conversations within a specific site, for example by using private messaging functionality.

Whilst many participants attempted to control their exposure, online attitudes to the risks and motivations for this control varied widely. Whilst some focused on maintaining boundaries between identities, others stated that they used their real name and a photo, as that "is the point" of social media (Participant 1). Where these self-disclosures are conscious and intended there is perhaps little problem but Brake highlights that some platforms are forcing users to identify themselves and therefore, the user loses a sense of control and right to anonymity (2014, p. 35).

Further evidence about privacy management surfaced during the interviews with six students. For some, they are managing their settings carefully or clearly demarcated their personal and professional online persona on different social media platforms (and establishing faceted identities for differing audiences). For others, these choices are about setting boundaries, for example participant three asked their mother to promise that they wouldn't comment or tag without their consent, whereas participant six advised others "...not [to] accept [a] friend request from everybody and try to be a little bit selective...don't give too much of yourself away".

There were also some who instilled their trust in the platforms' privacy management, such as participant one who stated "I hope that I can rely on Facebook's privacy". For others, they assume what boyd defines as "public-by-default, private-through-effort mentality" (boyd 2014, p. 62), such as this survey respondent:

*"...I'm very careful about what I post online. I openly link to social media profiles from sites like LinkedIn. I don't mind an employer looking me up first and make most status updates public. That way, I'm not hiding anything, and I'm not likely to post a private joke between friends that could be misunderstood somewhere down the line."* (Participant, Survey 2).

Whilst many students indicated use of privacy settings relatively few voiced this concern that material which is currently private might accidentally become public or be publicly shared. Given the frequency with which social



networking sites update terms of service and privacy policies, the data available to developers of connected "apps" and tools, and the ease with which information might be shared from one person to the next by accident or design (e.g. a screen capture of a theoretically ephemeral SnapChat message), this suggests a greater trust in social media platforms than may be justified by the technology and (corporate) culture around them.

Managing a digital footprint is complex and it is evident that privacy cannot be discussed in isolation, rather it is interwoven with online identity curation, as "Privacy doesn't just depend on agency; being able to achieve privacy is an expression of agency" (boyd 2014, p. 76).

## 5. Peer Support

There are many examples of the negative uses of social media, such as online bullying (4% of survey respondents stated that they had experienced this) or hacking of accounts (4%). However, there are also examples of students having positive online experiences, such as being approached for a job or volunteering opportunity or receiving help or support from a peer, and 16% of our participants reported just such an experience. Whilst the factors influencing these positive experiences cannot be established through the quantitative alone, it is worth noting that the University of Edinburgh has a culture of promoting peer support, for instance through the student associations' (EUSA) peer proofreading scheme.

The definition of 'peer support' may, of course, vary from one individual to another, nonetheless, it reinforces the potential for a community to support one and other online and this feature is something that universities will be encouraged to hear. Further examples of peer support were highlighted during the interviews, specifically in relation to the geo-located anonymous app, YikYak. YikYak has received a mixed response from institutions, especially where the app has been used for cyberbullying (Rubens 2015) or to make racist comments or threats (Thielman 2015). However, some of our interview participants emphasised that an anonymous space such as YikYak can be useful as a tool for peer support, especially in relation to personal issues (e.g. relationship breakdowns or mental ill health) or informal academic support during exam times.

Platforms that provide anonymous posting only remain anonymous so long as service providers secure the data and users do not disclose personal names. However, these spaces can also be used as positive spaces to provide support. We are currently developing a research approach in relation to peer support and the use of anonymous tools such as YikYak, so that we can gain a better understanding of how students are using these tools and how the University can align pastoral and support services to meet the needs of students.

## 6. Conclusion

Our research shows that students are making sophisticated use of social media sites for complex identity management, promotion of personal skills and considering many of the potential challenges associated with transitioning into and out of University, including their future professional roles.

Whilst many students are taking well-considered decisions about the information they disclose, and to whom they disclose it, there remain concerns, particularly when spaces offer apparently private areas or differentiated audiences for posts, given how high stakes any breach of these self-defined boundaries may be.

This research took place in parallel to an awareness raising campaign but even in this context, in which many workshops and training sessions were being provided, students did not always report engaging in practices that would help them to curate and manage their online tracks and traces, such as the 61% of survey participants who reported rarely changing privacy settings.

As a result of this research a range of evidence-based resources have been developed, including course handbook social media guidance, intended to assist teaching staff in promoting best practices, and set expectations of appropriate conduct around academic matters. Such guidelines provide clarity and consistency for students and



the staff who support them and we would recommend that those supporting students in other higher education organisations consider including such information as standard in course handbooks or similar authoritative spaces.

An eProfessionalism guide has also been developed, based on both the research analysis and consultation with professional colleagues across the University, encouraging students to reflect on their current practice and ensuring alignment between their conduct and the expectations of their professional career path. These resources, alongside further open educational resources, continue to be added to the Managing your digital footprint website.

This paper has given an overview of some key themes emerging from this research but the team are aware that there are many further avenues for exploration. Some of the most relevant to the student experience and teaching and learning practice relate to the areas of student transitions (Tobbell et al. 2010); to the wider aspects of e-professionalism (Chester et al. 2013); and there is far greater scope for in-depth analysis of specific behaviours and social media platforms (Rainie et al. 2013). Whilst some students did talk about social media in relation to their formal studies there is also a further strand of exploration to be done on the implications of current etiquette, identity work, and affordances for social media in the context of learning and teaching contexts and environments (Hallam Goodband et al. 2012).

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